

## A B S T R A C T

The drill string element has at least one bearing zone for bearing against the wall of the borehole during drilling. The bearing zone comprises at least one bearing segment extending in the axial direction and having an outside surface that is cylindrical and of constant diameter greater than the diameter of any other portion of the surface of the element, and also having a guide zone that is circularly symmetrical about the axis of the drill string element. The bearing zone preferably also has a drilling fluid activation zone extending axially in a disposition adjacent to the bearing segment. The guide zone presents a radius of curvature not less than one-third the outside diameter of the bearing segment. The outside surface of the intermediate activation zone presents a meridian having a first meridian portion and a second meridian portion situated downstream from the first meridian portion, the meridian portions being inclined in opposite directions relative to the axis, sloping towards the axis and being connected together by a minimum-diameter portion of the bearing zone.